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PATENT APPLICATION

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UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): E. David Neufeld et al.

Confirmation No.: 8143

Application No.: 10/039,018

Examiner: Zhuo H. Li

Filing Date: 12-31-2001

Group Art Unit: 2185

Title: Method to Increase the Life Span of Limited Cycle Read/Write Media

Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450TRANSMITTAL OF REPLY BRIEFTransmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on November 16, 2006.

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

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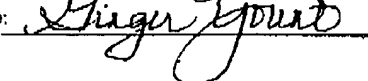
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Typed Name: Ginger Yount

Signature: 

Respectfully submitted,

E. David Neufeld et al.

By 

Dan C. Hu

Attorney/Agent for Applicant(s)

Reg No.: 40,025

Date: January 16, 2007

Telephone: (713) 468-8880, ext. 304

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	E. David Neufeld et al.	§	Art Unit:	2185
		§		
Serial No.:	10/039,018	§		
		§	Examiner:	Zhuo H. Li
Filed:	December 31, 2001	§		
		§		
For:	Method to Increase the Life	§	Atty. Dkt. No.:	200304388.1
	Span of Limited Cycle	§		(IPC:0032US)
	Read/Write Media	§		

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**REPLY BRIEF**

Sir:

The following sets forth Appellant's Reply to the Examiner's Answer dated November 16, 2006.

**A. REPLY TO EXAMINER'S ANSWER REGARDING CLAIMS 1, 2, 8-14, 16-18, AND 28**

In section (10) of the Examiner's Answer on page 9, the Examiner provided several responses to Appellant's arguments with respect to the final rejection of the above claims over Kriegsman and Lofgren.

One of the responses noted by the Examiner is as follows: "Note both Kriegsman and Lofgren both are related to a memory system." Examiner's Answer at 10. The Examiner then stated that "it would have been obvious to combine Kriegsman as per teaching of Lofgren." *Id.*

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Ginger Yount

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Just because Kriegsman and Lofgren both relate to a "memory system" does not mean that there existed any motivation or suggestion to combine the reference teachings to achieve the claimed invention. A significant teaching of Kriegsman is that dynamic files are kept in a primary web server and static files are kept in a secondary web server. Kriegsman, 6:35-38, 6:67-7:5, 7:63-8:3. By teaching that dynamic files are kept in a primary web server and static files are kept in a secondary web server, Kriegsman is actually teaching that the dynamic files be maintained in the storage hardware of the primary web server. The continued storage of dynamic files in the storage hardware of the primary web server necessarily means that the storage hardware of the primary web server would be subject to *more* wear than the storage hardware of the secondary web server, which contains static files that do not change. Yet Kriegsman specifically teaches that the dynamic files should remain in the primary web server to achieve enhanced communication speeds.

This teaching of Kriegsman is directly inconsistent with the teachings of Lofgren and what is recited in the claim. The migrating of a static file to a dynamic region and a dynamic file to a static region, as performed in claim 1, is for enhancing a lifespan of a read/write storage medium. In contrast, Kriegsman teaches the opposite, requiring that its dynamic files remain in the same location, the primary web server. Therefore, it is clear that the objective evidence of record establishes that a person of ordinary skill in the art would not have been led to combine the teachings of Kriegsman and Lofgren to achieve the claimed subject matter, and in any event such a hypothetical combination would not have achieved the claimed subject matter.

In fact, the teachings of Kriegsman contradict the purported motivation asserted in the Office Action for combining Kriegsman and Lofgren. In the Examiner's Answer, the Examiner stated that the motivation for combining Kriegsman with Lofgren "is to extend overall memory

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system lifetime without having to provide replacement groups of memory cell ...." Examiner's Answer at 10. This is unfounded speculation on the part of the Examiner because Kriegsman teaches the opposite, namely, requiring that dynamic files, which are files that are modified for each transfer in the network (Kriegsman, 1:7-12), be kept in the same place, the primary web server, whereas static files that are repeatedly transferred without changes (Kriegsman, 1:7-12) are kept in one or more secondary web servers. Instead of teaching that it would be desirable to achieve wear leveling by distributing dynamic files across the primary and secondary web servers, Kriegsman actually teaches that it would be desirable to store all the dynamic files in the primary web server (thereby subjecting the primary web server to *more* wear), and maintaining the static files in secondary web server(s). This by itself is a clear indication that no motivation or suggestion existed to combine Kriegsman and Lofgren.

In further response to Appellant's arguments that the teachings of Lofgren are inconsistent with the goals of Kriegsman, the Examiner made the following assertion:

[T]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

Examiner's Answer at 10-11.

The "combined teachings" of the references, in this case, Kriegsman and Lofgren, would be to maintain dynamic files on a primary web server, and static files on secondary web server(s), to achieve enhanced communication speeds—a stated goal of Kriegsman. As stated by the M.P.E.P., one of the factors considered in determining the appropriateness of modifying a primary reference based on teachings of a secondary reference is whether the proposed modification would render the reference being modified unsatisfactory for its intended purpose.

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M.P.E.P. § 2143, at 2100-137. If so, then there is no suggestion or motivation to make the proposed modification. *Id.*; see also *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125 (Fed. Cir. 1984) (holding that a *prima facie* case of obviousness was not established where the proposed modification of the apparatus of the cited reference would render the apparatus inoperable for its intended purpose). Here, if the proposed modification of Kriegsman were made based on the teachings of Lofgren, as suggested by the Examiner, then the intended purpose of Kriegsman would be defeated, since dynamic files would no longer be maintained just in the primary web server and static files would no longer be just maintained in secondary web server(s). The proposed modification, which would require distribution of dynamic files and static files among the primary and secondary web servers, would defeat the goal of maintaining the dynamic and static files on different servers to achieve enhanced communications speeds, as taught by Kriegsman.

Therefore, Appellant has properly established that the Examiner has failed to establish a *prima facie* case of obviousness. Claim 1 (and its dependent claims) is therefore allowable over Kriegsman and Lofgren. Independent claims 13 and 17 (and their respective dependent claims) are also similarly allowable.

In view of the foregoing, and arguments presented in the Appeal Brief, reversal of the final rejection of the above claims is respectfully requested.

**B. REPLY TO EXAMINER'S ANSWER REGARDING CLAIMS 3-5, 7, 15, 19, AND 30**

Claim 3, a dependent claim that depends from claim 1, recites that the step of identifying whether a file on a read/write storage medium is a static file or a dynamic file comprises comparing the number of rewrite cycles of the file to a predetermined read/write cycle threshold.

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The Examiner cited column 5, lines 56-65, of Lofgren as disclosing this feature of claim 3. The cited passage refers to determining when wear leveling is necessary by comparing the number of block writes which have occurred to the present time in each of the memory banks, either by total number of block writes or some type of average of cycles of blocks within the bank. The cited passage of Lofgren also states that when the numbers of block writes becomes skewed in excess of a set threshold amount, then a wear leveling processing is initiated. Note that the threshold mentioned refers to threshold on wear of memory banks; this threshold is not used for the purpose of identifying whether a particular file on a storage medium is a static file or a dynamic file.

The Examiner, in the Examiner's Answer, further cited to Kriegsman's teaching that its memory system is capable of identifying whether a file in a read/write storage medium is a static file or a dynamic file. Examiner's Answer at 12. Specifically, the Examiner pointed to column 5, lines 58-65, and associated drawings as disclosing this identifying step of Kriegsman. In Kriegsman, the dynamic files are those files that provide dynamic and interactive pages. Kriegsman, 4:60-62. In fact, dynamic files contain dynamic and interactive pages, whereas static files contain static pages that cannot be changed. Kriegsman, 2:60-65. As stated by Kriegsman, "[d]ynamic and interactive pages are essentially separate software programs that produce pages as their output." Kriegsman, 2:64-65. As further explained by the passage in column 5 of Kriegsman cited by the Examiner, dynamic data files include standardized tags as well as text data, whereas static data files include non-text data, such as image data, animation data, video data, audio data, and computer programs. Kriegsman, 5:62-65. Thus, the identification of whether a file is a dynamic file or a static file as performed in Kriegsman is based on the content of the file. The teaching in column 5, lines 56-65, of Lofgren for determining whether uneven

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wear is occurring in memory banks is completely unrelated to identifying whether a file is a dynamic file or static file in the context of Kriegsman. Therefore, contrary to the assertion by the Examiner, no motivation or suggestion existed to combine the teachings of Kriegsman and Lofgren to achieve the subject matter of claim 3.

Dependent claims 15 and 19 are allowable for similar reasons.

In view of the foregoing and arguments presented in the Appeal Brief, reversal of the final rejection of the above claims is respectfully requested.

**C. REPLY TO EXAMINER'S ANSWER REGARDING CLAIM 6**

In response to Appellant's arguments in the Appeal Brief with respect to dependent claim 6, the Examiner has still failed to address Appellant's arguments that Kriegsman and Lofgren do not teach or suggest a predetermined rewrite cycle threshold (for identifying whether a file is a static file or dynamic file) being based on *self-testing* by performing rewrite cycles to a data block of the read/write storage medium until the data block is unstable.

Therefore, reversal of the final rejection of claim 6 is respectfully requested in view of the arguments presented in the Appeal Brief.

**D. REPLY TO EXAMINER'S ANSWER REGARDING CLAIMS 29 AND 31**

Claim 29, which depends from claim 1, recites that identifying whether the file is a static file or a dynamic file comprises *reclassifying* the file based on a number of rewrite cycles to the file, from the *initial* identification of a static file or a dynamic file.

The Examiner cited column 3, lines 32-42, of Kriegsman as disclosing the identifying of whether a file is a static file or a dynamic file, and the Examiner asserted that this identification

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constitutes the initial identification recited in claim 29. The Examiner then cited Lofgren as disclosing the reclassifying recited in claim 29, citing specifically to column 5, lines 18-31, and 56-65, of Lofgren. The cited passages refer to wear leveling, in which data is transferred between the most heavily used and least used memory banks. The cited passages of Lofgren further teach that the determination of when wear leveling is necessary is based on comparing the number of block writes that have occurred to each of the memory banks. Determining whether memory banks are subjected to uneven wear is completely unrelated to identifying whether a file is a static file or a dynamic file. In other words, Lofgren provides absolutely no suggestion of *reclassifying* the file of Kriegsman as being a static file or a dynamic file that is based on the number of rewrite cycles to the file. All Lofgren suggests is the determination of whether memory banks are subject to uneven wear.

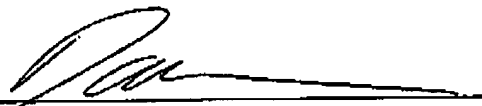
In view of the foregoing, reversal of the final rejection of the above claims is respectfully requested.

**E. CONCLUSION**

Since the Examiner has failed to establish a *prima facie* case of obviousness, reversal of all final rejections is respectfully requested.

Respectfully submitted,

Date: 1-16-2007

  
Dan C. Hu  
Registration No. 40,025  
TROP, PRUNER & HU, P.C.  
1616 South Voss Road, Suite 750  
Houston, TX 77057-2631  
Telephone: (713) 468-8880  
Facsimile: (713) 468-8883